

Name: _____

pa1030: Box multiplication of linear binomials (v6)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(6x + 3)$ and $(9x + 5)$.

*	6x	3	
9x	$54x^2$	27x	
5	30x	15	

ANSWER: $54x^2 + 57x + 15$

Question 2

Use the box method to multiply $(4x - 9)$ and $(-6x + 2)$.

*	$4x$	-9
$-6x$	$-24x^2$	$54x$
2	$8x$	-18

ANSWER: $-24x^2 + 62x - 18$

Question 3

Use the box method to multiply $(8x + 3)$ and $(2x - 9)$.

*	$8x$	3
2x	$16x^2$	$6x$
-9	$-72x$	-27

ANSWER: $16x^2 - 66x - 27$